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NICKEL IN OCTOBER 1999

In October, reported domestic nickel consumption on a daily average basis was 11% less than that of September, according to the U.S. Geological Survey. Average daily consumption by the stainless steel industry in October was 16% lower than the September average of 115 metric tons (t). Consumption of elemental nickel to make nickel-base corrosion-resistant alloys decreased by 15%. The decreases for stainless steel and nickel-base alloys were partially offset by increases in two other end use categories. Daily consumption by alloy steel producers—a considerably smaller tonnage than that of stainless steel—increased slightly. Sales to plating companies averaged 39 metric tons per day (t/d), up 4% from the September sales figure of 37 t/d. Percentages reported in this paragraph may not be verifiable owing to concealment of individual company proprietary data.

On October 31, U.S. consumer stocks of cathode, pellets, briquets, and powder totaled 3,060 t—3% less than the 3,150 t (revised) for September 30 and 52% less than the 1998 high of 6,330 t reached on December 31, 1998. Stocks in London Metal Exchange (LME) warehouses worldwide decreased by 3% during October to 47,832 t. LME stocks at yearend 1998 were 65,964 t. Preliminary data collected by the International Nickel Study Group indicated that, at the end of October, world nickel producers (excluding those in Austria, China, the former Yugoslavia, and the Ural area of Russia) had approximately 92,600 t of Ni in primary products in stock, of which 66,500 t were Class I materials. Class I materials are refined products with a nickel content of 99% or greater (electrolytic cathode, pellets, briquets, rondelles, powder, etc.). Class II materials include ferronickel, nickel oxide sinter, and East Asian utility nickel—products with a nickel content less than 99%.

The United States imported 108,000 t of primary nickel during the first 9 months of 1999, 6% less than the 116,000 t for the corresponding period of 1998. Class I materials accounted for 85% of total primary imports received during the first 9 months of 1999. Trade data for October 1999 will appear in a subsequent issue.

Update

New dollar coin contains nickel, but only in a limited quantity

The U.S. Mint is planning to put its new Golden Dollar coin into general circulation in March 2000. The coin was authorized by the United States Dollar Coin Act of 1997 (Section 4 of Public Law 105-124) and will replace the Susan B. Anthony (SBA) Dollar which has been in circulation since 1979. The Golden Dollar coin will co-exist with the traditional one dollar bank note (U.S. Mint, 1999e). In early December, the Mint released samples of the new coin to manufacturers of vending machines and other stakeholders for full field testing. The field tests will allow vendors to make final calibrations and adjustments before the coin enters commerce (U.S. Mint, 1999f).

The construction and electromagnetic properties of the Golden Dollar are very similar to those of the SBA coin. Both the Golden Dollar and the SBA are clad coins, 2 millimeters thick, and 26.5 millimeters in diameter. Both are constructed by sandwiching a pure copper core between outer layers of an alloy. In the case of the Golden Dollar, the alloy layers on each side of the core are manganese brass, a golden-colored material. Table 1 compares the chemical composition of Golden Dollar alloy with that of the SBA:

TABLE 1
CHEMICAL COMPOSITION OF THE ALLOY LAYER

	Golden Dollar	SBA Dollar
Copper	77 %	75%
Manganese	7	—
Nickel	4	25
Zinc	12	—
		100 %

It was extremely important that the electromagnetic signature and density of the new alloy closely match the signature and density of the cupro-nickel alloy used in the SBA. Because the two coins are

identical in size and weight, thousands of vending and mass transit machines that now accept SBAs will not have to be reprogrammed or refitted (U.S. Mint, 1999a).

The obverse (or front) side of the new coin bears the likeness of Sacagawea, the young Shoshone woman who assisted the Lewis and Clark expedition on its journey from the Great Plains to the Pacific in 1804. The reverse side has a soaring bald eagle encircled by 17 stars—one for each State in the Union at the time of the expedition. The Golden Dollar has a smooth edge and a wider border than that of the SBA so that the coin is easily discernible from the quarter and the SBA by touch alone. Both the quarter and the SBA dollar have reeded edges.

The Philadelphia mint began full-scale production of the Golden Dollar on November 18, 1999 (U.S. Mint, 1999d). The coin weighs 8.1 grams and has an overall composition of 88.5% copper, 6.0% zinc, 3.5% manganese, and 2% nickel. The Mint will have to produce more than 100 million of the coins annually if demand projections based on market research are correct. The Mint's coin presses can produce about 800 coins per minute. More than 16 tons of nickel would be consumed annually to make the coins.

The Mint is producing the Golden Dollar for four reasons. First, demand for dollar coins in commerce is increasing. The new coin is expected to be readily accepted by mass transit passengers because it should speed up transactions and allow passengers to carry fewer coins (U.S. Mint, 1999b). Second, the coin will last longer than the banknote. Change machines frequently will not accept consumers' worn dollar bills. The average life span of the coin should be about 25 years. Third, the Government's stocks of SBA dollars are nearly exhausted. Fourth, the Golden Dollar will be easily distinguishable from the traditional quarter, unlike the SBA coin (U.S. Mint, 1999c).

For additional information, visit the Golden Dollar website at URL http://www.usmint.gov/GoldenDollar/.

References Cited

U.S. Mint, 1999a, Mint announces alloy for new Golden Dollar coin: New York, NY, U.S. Mint, press release, October 5, 3 p.

———1999b, Transit industry can bank on new Golden Dollar: Washington, DC, U.S. Mint, press release, October, undated, 2 p.

———1999c, United States Mint unveils new Golden Dollar: Washington, DC, U.S. Mint, press release, September, undated, 2 p.

———1999d, U.S. Mint begins full production of new Golden Dollar: Philadelphia, PA, U.S. Mint, press release, November 18, 3 p.

———1999e, U.S. Mint prepares the Nation for the Golden Dollar: Washington, DC, U.S. Mint, press release, August, undated, 1 p.

———1999f, U.S. Mint releases samples of new "Golden Dollar" coin: Washington, DC, U.S. Mint, press release, December 2, 2 p.

TABLE 1
CONSUMPTION OF NICKEL (EXCLUSIVE OF SCRAP), BY FORM AND USE 1/

(Metric tons, nickel content)

Period	Cathodes, pellets, briquets, and powder	Ferronickel	Oxide-sinter, salts, and other forms	Total	Total year to date
1998:					
October	6,850	999	553	8,400	85,200
November	5,910	1,050	490	7,450	92,700
December	6,000	1,140	650	7,790	100,000
January-December	81,400	13,700	5,290	100,000	XX
1999:					
January	6,310	988	399	7,700	7,700
February	6,540	824	669	8,030	15,700
March	7,840 r/	487	817	9,150 r/	24,900
April	7,680 r/	845	602	9,130 r/	34,000
May	8,050 r/	1,150	695	9,900 r/	43,900
June	8,310 r/	1,200	695	10,200	54,100 r/
July	7,560 r/	1,160	481	9,190 r/	63,300 r/
August	7,140 r/	1,000	349	8,490 r/	71,800 r/
September	7,100 r/	1,490	321	8,920 r/	80,700 r/
October:					
Steel:					
Stainless and heat resisting	1,740	1,160	W	2,900	36,100
Alloy (excludes stainless)	372	W	W	372	5,450
Superalloys	1,250	--	W	1,250	13,700
Copper-nickel alloys	W	W	--	W	W
Electrical, magnetic, and expansion alloys	32	--	--	32	360
Other nickel & nickel alloys	W	--	W	W	10,200
Cast iron	W	--	--	W	W
Electroplating (sales to platers)	1,200	--	--	1,200	11,600
Chemical and chemical uses	W	--	--	W	W
Other uses	2,110	9	288	2,410	11,500
Total reported	6,700 2/	1,170	288	8,160	88,800
Total all companies (calc) 3/	XX	XX	XX	12,100	131,000
1999: January-October	73,200	10,300	5,320	88,800	XX
1998: January-October	69,500	11,500	4,150	85,200	XX

r/ Revised. W Withheld to avoid disclosing company proprietary data; included in "Other uses" category. XX Not applicable.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Of consumption, 5,530 metric tons were consumed as cathodes and pellets, the remainder as briquets and powder.

3/ Figures represent calculated apparent consumption; based on the revised proportion of reported primary consumption (67.6852%) to apparent primary consumption for 1997.

TABLE 2
ENDING STOCKS OF NICKEL (EXCLUSIVE OF SCRAP) HELD BY CONSUMERS,
BY FORM AND USE 1/ 2/

(Metric tons, nickel content)

Period	Cathodes, pellets, briquets, and powder	Ferronickel	Oxide-sinter, salts, and other forms	Total
1998:				
October	3,170	726	452	4,350
November	3,090	471	415	3,970
December	6,330	877	1,420	8,620
1999:				
January	5,770	308	1,300	7,370
February	4,410	112	989	5,510
March	3,580	354	431	4,360
April	3,120 r/	97	364	3,590
May	3,600	145	351	4,100
June	3,840 r/	110	312	4,260 r/
July	3,560 r/	170	263	4,000 r/
August	3,020 r/	315	269	3,610 r/
September	3,150 r/	202	447 r/	3,800 r/
October:				
Steel (stainless, heat resisting and alloy)	1,390	320	(3/)	1,710
Nonferrous alloys 4/	1,530	--	(3/)	1,530
Foundry (cast irons)	(3/)	--	--	(3/)
Chemical (catalysts, ceramics, plating salts, etc.) and unspecified uses	134	--	507	641
Total	3,050	320	507	3,880

r/ Revised.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Stocks held by companies that consume nickel in more than one end-use category are credited to the major category. Stocks are subject to revisions owing to inventory adjustment.

3/ Included in the "Chemical and unspecified uses" category.

4/ Includes superalloys, nickel-copper and copper-nickel alloys, permanent magnet alloys, and other nickel alloys.

TABLE 3
CONSUMPTION AND ENDING STOCKS OF PURCHASED SECONDARY NICKEL, BY USE 1/

(Metric tons, nickel content)

	Consumption			Stocks		
Period	Ferrous scrap 2/	Nonferrous scrap 3/	Total scrap	Ferrous scrap 2/	Nonferrous scrap 3/	Total scrap
1998:						
October	3,150	737	3,890	4,600	145	4,740
November	3,070	783	3,850	4,850	156	5,000
December	4,290	623	4,910	4,480	161	4,640
January-December	47,300	9,640	56,900	XX	XX	XX
1999:						
January	4,160 r/	797	4,960 r/	4,070 r/	153	4,220 r/
February	3,800 r/	748	4,550 r/	4,250 r/	156	4,400 r/
March	3,890 r/	850	4,740 r/	4,240 r/	159	4,400 r/
April	3,990 r/	963	4,950 r/	3,650 r/	160	3,810 r/
May	4,360 r/	700	5,060 r/	3,190 r/	171	3,360 r/
June	4,610 r/	1,320	5,930 r/	2,780 r/	217	3,000 r/
July r/	3,740	1,070	4,810	2,590	177	2,760
August	4,120 r/	1,090	5,200 r/	2,530 r/	167	2,700 r/
September	4,950 r/	1,030 r/	5,980 r/	2,890 r/	157	3,040 r/
October	4,770	1,260	6,030	2,700	156	2,860
1999: January-October	42,400	9,840	52,200	XX	XX	XX
1998: January-October	39,900	8,230	48,100	XX	XX	XX

r/ Revised. XX Not applicable.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Nickel content is calculated from an average nickel content and the reported gross weight of scrap.

3/ Combined consumption and stocks of aluminum-base, copper-base, and nickel-base scrap.

TABLE 4
U.S. IMPORTS FOR CONSUMPTION OF NICKEL, BY COUNTRY 1/

(Metric tons, nickel content 2/)

Period and country of origin	Cathodes, pellets, and briquets	Powder and flakes	Ferro-nickel	Metal-lurgical-grade oxide	Waste and scrap	Stainless steel scrap	Chemicals	Total 3/	Total year to date 4/	Wrought nickel
1998:										
September	9,560	577	1,330	401	271	266	258	12,700	123,000	66
October	11,100	1,100	741	495	273	213	271	14,200	137,000	50
November	7,850	616	999	433	300	174	228	10,600	147,000	121
December	6,710	774	296	500	315	169	321	9,080	156,000	84
January-December	120,000	9,850	12,800	2,140	4,210	4,290	3,140	156,000	XX	819
1999:										
January	9,930	697	1,230	185	281	160	181	12,700	12,700	83
February	6,540	783	1,440	302	265	211	240	9,780	22,400	23
March	10,700	926	836	366	394	178	235	13,600	36,100	78
April	6,230	769	1,150	306	414	181	302	9,350	45,400	103
May	9,940	575	860	231	428	303	190	12,500	57,900	80
June	13,000	1,080	1,550	399	260	415	241	16,900	74,800	58
July	5,910	939	1,730	--	330	243	232	9,380	84,200	105
August	9,280	790	1,310	285	316	263	161	12,400	96,600	110
September:										
Australia	814	80	--	--	--	--	--	894	10,700	--
Brazil	--	--	--	--	--	--	--	--	3,680	--
Canada	4,660	470	--	243	56	119	2	5,550	44,700	23
Colombia	--	--	98	--	--	--	--	98	1,270	--
Dominican Republic	--	--	836	--	--	--	--	836	5,400	--
Finland	260	84	--	--	--	--	70	414	3,680	--
France	151	--	308 5/	--	40	--	24	523	3,300	2
Germany	--	7	--	--	21	1	10	39	510	53
Japan	--	2	--	--	8	--	44	54	679	22
Mexico	--	--	--	--	4	143	--	147	1,090	13
New Caledonia	--	--	--	--	--	--	--	--	3,470	--
Norway	5,860	--	--	--	--	--	--	5,860	18,700	--
Russia	1,460	73	--	--	--	--	--	1,530	11,600	--
South Africa	--	--	--	--	--	--	--	--	143	--
United Kingdom	--	81	--	--	48	--	9	138	1,810	(6/)
Zimbabwe	80	--	--	--	--	--	--	80	833	--
Other	500	21	(6/)	--	15	7	111	654	1,860	7
Total	13,800	818	1,240	243	192	270	270	16,800	113,000	120
1999: January-September	85,200	7,380	11,300	2,320	2,880	2,220	2,050	113,000	XX	760
1998: January-September	94,400	7,350	10,800	708	3,330	3,730	2,320	123,000	XX	566

XX Not applicable.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ The nickel contents are assumed to be as follows: metallurgical-grade oxide (77%), waste and scrap (50%), and stainless steel scrap (7.5%). The chemical category includes chlorides (25%), sulfates (22%), and other salts (22%), supported catalysts (22%), and oxide, sesquioxide and hydroxide (65%).

3/ Excludes wrought nickel.

4/ May include revisions for prior months.

5/ All or part of these data have been referred to the Bureau of the Census for verification.

6/ Less than 1/2 unit.

Source: Bureau of the Census.

TABLE 5
U.S. EXPORTS OF NICKEL, BY COUNTRY 1/

(Metric tons, nickel content 2/)

Period and country of destination	Cathodes, pellets, and briquets	Powder and flakes	Ferro-nickel	Metal-lurgical-grade oxide	Waste and scrap	Stainless steel scrap	Chemicals	Total 3/	Total year to date	Wrought nickel
1998:										
September	104	85	1	111	971	1,270	336	2,870	31,900	80
October	142	95	--	138	1,060	1,940	235	3,610	35,500	127
November	38	108	1	158	1,300	1,040	156	2,800	38,300	39
December	217	90	1	96	1,120	3,340	367	5,230	43,500	77
' January-December	1,210	1,080	918	1,230	12,700	22,400	4,010	43,500	XX	991
1999:										
January	93	60	--	100	615	787	337	1,990	1,990	149
February	11	93	3	168	812	1,010	337	2,440	4,430	59
March	36	90	1	105	958	1,850	460	3,500	7,930	63
April	15	69	1	161	989	2,070	334	3,640	11,600	77
May	78	44	--	102	920	1,600	523	3,270	14,800	121
June	54	85	2	94	979	1,950	200	3,360	18,200	59
July	65	76	6	105	725	1,310	363	2,650	20,800	52
August	142	82	9	181	945	1,280	256	2,900	23,700	69
September:										
Australia	--	--	--	--	--	--	--	--	19	1
Belgium	--	16	--	--	52	--	4	72	491	2
Canada	20	14	1	230	708	218	45	1,240	9,600	12
Germany	--	7	--	--	17	17	15	56	499	1
India	--	1	--	--	--	19	--	20	172	--
Italy	(4/)	(4/)	--	--	--	--	--	(4/)	21	--
Japan	--	3	--	--	272	437	26	738	2,280	2
Korea, Republic of	--	1	--	--	--	713	1	715	5,440	1
Mexico	34	2	--	--	--	--	61	97	978	10
Netherlands	--	1	--	--	--	7	4	12	199	(4/)
South Africa	--	(4/)	--	--	--	119	6	125	909	--
Spain	--	--	--	--	--	--	--	--	2,000	(4/)
Sweden	--	--	--	--	9	--	(4/)	9	131	--
Taiwan	--	1	--	--	--	240	5	246	2,600	(4/)
United Kingdom	--	2	29	--	167	--	3	201	480	12
Other	20	12	--	--	2	55	50	139	1,580	11
Total	74	60	30	230	1,230	1,830	220	3,670	27,400	52
1999: January-September	567	659	50	1,250	8,170	13,700	3,030	27,400	XX	701
1998: January-September	809	781	916	837	9,220	16,100	3,250	31,900	XX	748

XX Not applicable.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ The nickel contents are assumed to be as follows: metallurgical-grade oxide (77%), waste and scrap (50%), and stainless steel scrap (7.5%). The chemical category includes chlorides (25%), sulfates (22%), and other salts (22%), supported catalysts (22%), and oxide, sesquioxide and hydroxide (65%).

3/ Excludes wrought nickel.

4/ Less than 1/2 unit.

Source: Bureau of the Census.

TABLE 6
U.S. IMPORTS FOR CONSUMPTION OF NICKEL ALLOYS, BY COUNTRY 1/

(Metric tons, gross weight)

Period and country of origin	Unwrought alloyed ingot	Bars, rods, and profiles	Wire	Plates and sheets	Foil	Tubes and pipes	Other alloyed articles	Total	Total year to date
1998:									
September	230	129	284	124	9	84	49	910	9,240
October	207	121	228	117	--	130	41	844	10,100
November	228	130	331	185	--	150	41	1,070	11,100
December	130	276	261	189	--	112	16	984	12,100
January-December	2,250	2,140	3,710	1,860	19	1,600	559	12,100	XX
1999:									
January	239	188	277	166	--	120	38	1,030	1,030
February	198	253	339	172	1	37	48	1,050	2,080
March	291	311	427	200	2	135	79	1,440	3,520
April	265	222	344	137	2	33	72	1,070	4,590
May	248	174	348	242	(2/)	244	75	1,330	5,920
June	248	162	373	298	1	74	52	1,210	7,130
July	209	180	341	201	1	94	63	1,090	8,220
August	172	124	332	268	(2/)	65	46	1,010	9,220
September:									
Australia	--	--	--	--	--	--	--	--	642
Belgium	--	--	--	(2/)	--	--	--	(2/)	113
Canada	17	--	(2/)	--	--	3	2	22	310
France	--	--	3	4	8	--	(2/)	15	953
Germany	29	68	65	184	--	12	3	361	3,580
Italy	--	51	5	--	--	(2/)	15	71	627
Japan	--	--	1	2	2	10	3	18	362
Mexico	--	--	(2/)	--	--	--	--	(2/)	34
Netherlands	--	--	--	--	--	--	11	11	167
South Africa	19	--	--	--	--	--	--	19	290
Sweden	--	16	159	2	--	--	--	177	1,490
United Kingdom	63	15	5	(2/)	(2/)	10	51	144	1,170
Other	--	8	8	--	--	(2/)	24	40	369
Total	128	158	246	192	10	35	109	878	10,100
1999: January-September	2,000	1,770	3,030	1,880	16	835	582	10,100	XX
1998: January-September	1,680	1,610	2,890	1,370	20	1,210	460	9,240	XX

XX Not applicable.
1/ Data are rounded to three significant digits; may not add to totals shown.
2/ Less than 1/2 unit.

Source: Bureau of the Census.

TABLE 7
U.S. EXPORTS OF NICKEL ALLOYS, BY COUNTRY 1/

(Metric tons, gross weight)

Period and country of destination	Unwrought alloyed ingot	Bars, rods, and profiles	Wire	Plates and sheets	Foil	Tubes and pipes	Other alloyed articles	Total	Total year to date
1998:									
September	492	301	196	804	4	158	210	2,170	20,100
October	559	373	167	732	6	134	232	2,210	22,300
November	460	313	140	661	7	61	150	1,790	24,100
December	577	456	171	472	1	56	218	1,950	26,000
January-December	5,970	4,150	2,500	9,100	94	1,160	3,040	26,000	XX
1999:									
January	573	264	170	575	14	104	655	2,360	2,360
February	1,090	370	129	723	6	103	263	2,680	5,040
March	896	496	163	688	7	48	206	2,500	7,540
April	910	349	168	688	72	72	266	2,530	10,100
May	545	396	181	614	3	63	193	2,000	12,100
June	682	363	225	620	5	63	272	2,230	14,300
July	702	330	192	486	4	46	483	2,240	16,500
August	643	184	322	570	7	53	273	2,050	18,600
September:									
Australia	--	(2/)	4	55	--	(2/)	(2/)	59	305
Belgium	5	99	--	18	--	--	(2/)	122	512
Canada	47	22	24	50	2	33	37	215	1,770
France	669	39	(2/)	7	(2/)	(2/)	9	724	6,260
Germany	3	37	3	28	(2/)	(2/)	12	83	693
India	--	(2/)	--	(2/)	--	--	(2/)	(2/)	12
Ireland	--	--	20	(2/)	(2/)	--	(2/)	20	349
Italy	43	(2/)	1	40	2	2	(2/)	88	794
Japan	10	2	7	66	--	1	1	87	1,800
Korea, Republic of	7	4	2	6	--	5	2	26	628
Mexico	5	3	45	13	1	4	45	116	977
Netherlands	--	10	(2/)	6	--	(2/)	2	18	600
Singapore	(2/)	(2/)	1	(2/)	--	(2/)	1	3	228
Spain	(2/)	(2/)	--	1	--	(2/)	--	1	24
Sweden	--	--	(2/)	9	(2/)	1	--	10	95
Switzerland	--	3	(2/)	31	--	(2/)	(2/)	34	414
Taiwan	(2/)	(2/)	2	1	--	1	(2/)	4	198
United Kingdom	11	101	26	170	(2/)	1	2	311	2,990
Other	6	43	4	41	1	6	53	154	2,010
Total	806	363	139	542	6	54	164	2,080	20,700
1999: January-September	6,850	3,120	1,690	5,510	124	606	2,780	20,700	XX
1998: January-September	4,380	3,010	2,030	7,230	78	914	2,440	20,100	XX

XX Not applicable.
1/ Data are rounded to three significant digits; may not add to totals shown.
2/ Less than 1/2 unit.

Source: Bureau of the Census.

TABLE 8
NICKEL CONSUMPTION IN CAST AND WROUGHT PRODUCTS

	Percent	
	Wrought	Cast
October 1999:		
Stainless and heat resisting steels	78	22
Alloy steels	99	1
Superalloys	86	14
Copper-nickel alloys	97	3
Other nickel-base alloys	100	(1/)

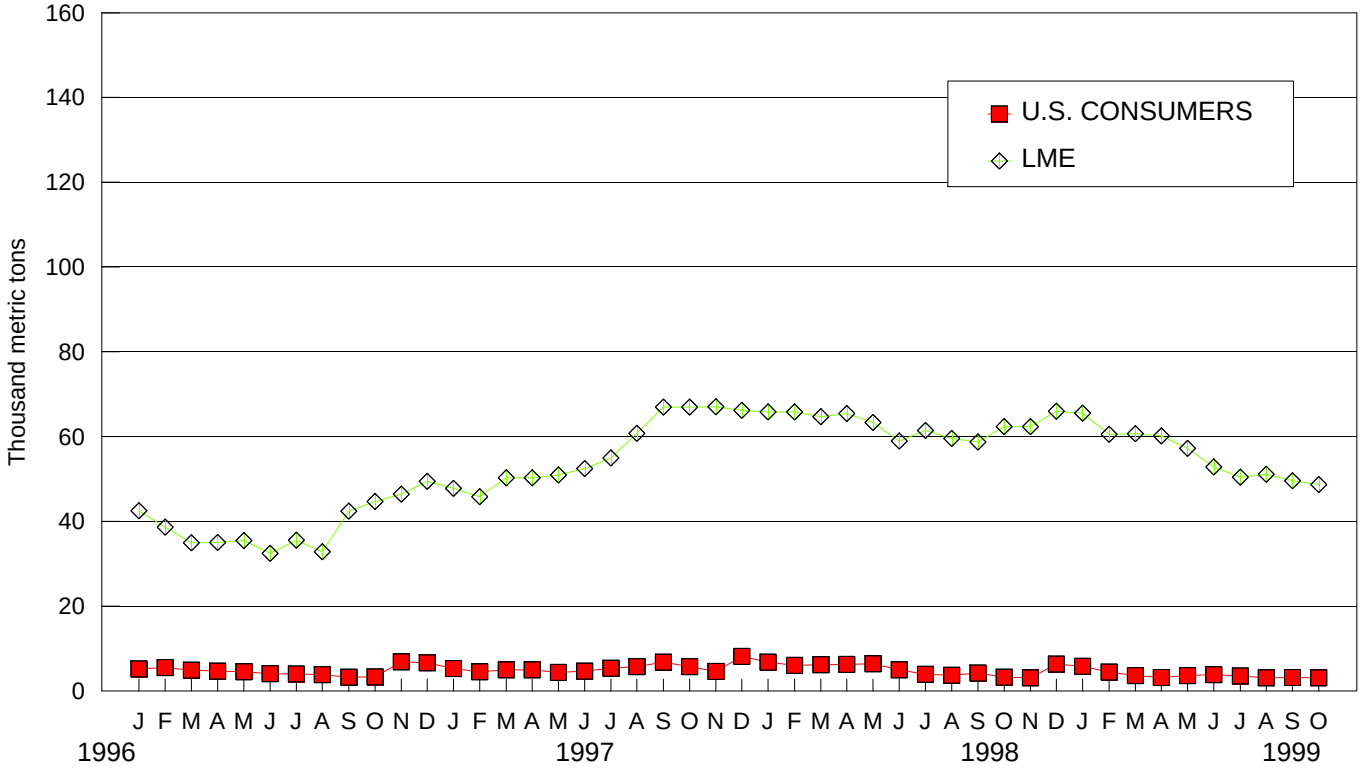
1/ Less than 1/2 unit.

TABLE 9
NICKEL PRICES

Date	Cathode NY Dealer $/lb.	LME Cash $/t	LME Cash $/lb.	18/8 Stainless steel scrap Pittsburgh $/long ton(gw)
1999:				
Average for month of:				
September	3.164	7,028.409	3.188	690
October	3.338	7,321.190	3.321	716
November	3.665	7,949.545	3.606	760
Average for week ending:				
September 3	3.18-3.23	6,870.625	3.116	680-700
September 10	3.10-3.34	7,195.000	3.264	680-700
September 17	3.12-3.36	7,015.000	3.182	680-700
September 24	3.23-3.34	6,996.000	3.173	680-700
October 1	3.19-3.31	6,989.000	3.170	680-700
October 8	3.24-3.29	6,982.000	3.167	710-735
October 15	3.14-3.44	7,113.000	3.226	710-735
October 22	3.44-3.62	7,553.500	3.426	710-735
October 29	3.53-3.62	7,683.500	3.485	710-735
November 5	3.69-3.82	7,980.500	3.620	750-770
November 12	3.69-3.77	8,031.000	3.643	750-770
November 19	3.63-3.74	7,878.000	3.573	750-770
November 26	3.65-3.72	7,911.000	3.588	750-770

Source: Platt's Metals Week and American Metal Market.

1996-99 STOCKS



1996-99 AVERAGE MONTHLY PRICES

(Derived from Metals Week and American Metal Market quotations)